[0064] ABSTRACT OF THE DISCLOSURE

[0065] A network device that controls the communication of data frames between stations includes a memory that stores frame pointers that point to addresses in an external memory. The data frames are stored in the external memory while the network device generates frame forwarding information for the respective data frames. The network device divides the available frame pointers into a number of categories corresponding to priorities associated with the data frames. When a frame is received at the network device, frame processing logic determines the priority of the data frame and checks whether a frame pointer corresponding to that particular priority is available. If no frame pointer corresponding to that priority is available, the multiport switch drops the data frame.